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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,075	02/13/2002	Daniel Conrad Benson	02P00323US	7565

7590 03/15/2004

Attn: Elsa, Keller, Legal Administrator
Siemens Corporation
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER	
DHARIA, PRABODH M	

ART UNIT	PAPER NUMBER
2673	6

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/075,075	BENSON ET AL.	
	Examiner	Art Unit	
	Prabodh M Dharia	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2,3 & 5*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detail Office Action

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 15-19, 21, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Dahley et al. (6,501,463 B1).

The applied reference has a common assgnee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding Claim 15, Dahley et al. teaches a method of configuring an operating control device (Col. 5, lines 4,5) having a foam tactile sensor (Col. 5, Lines 47,48, Col. 9, Lines 14-24),

said method comprising the steps of (a) defining an input button (Col. 10, Lines 25-28) and a location of said input button corresponding to a portion of said tactile sensor (Col. 5, Line 50 to Line 5), (b) defining a first function of said input button (Col. 10, Lines 25-28), said first function associated with an existence of, a first defined level of pressure of (Col. 10, lines 29-41), and a location of a touch on said tactile sensor (Col. 10, Lines 28-30); and (c) defining a second function of said input button, said second function associated with an existence of, a second defined level of pressure of, and said location of a touch on said tactile sensor (col. 8, Line 46 to Col. 9, Line 6).

Regarding Claim 16, Dahley et al. teaches the steps of establishing a first configuration resulting from said steps (a) to (c); generating a first representation of said input button for placement over the tactile sensor within said wherein operating control device (Col. 10, Lines 25-41); and loading said first configuration into said operating control device to enable said operating control device (Col. 8, Lines 40-45) to determine an appropriate output dependent on said first or second defined level of pressure at said location of said touch (Col. 8, Line 46 to Col. 9, Line 5).

Regarding Claim 17, Dahley et al. teaches the steps of changing said first function or said second function of said input button to result in a different output; establishing a second configuration resulting from said changing step (Col. 8, Line 46 to Col. 9, line 5); loading said second configuration into said operating control device to enable said operating control device to determine a different appropriate output (Col. 8, Lines 40-45).

Regarding Claim 18, Dahley et al. teaches input button defining step includes defining the type of said input button (Col. 8, Lines 38-45, Col. 10, Lines 25-28).

Regarding Claim 19, Dahley et al. teaches type of said input button can comprise a toggle button, a pressure-sensitive button, a time-sensitive button, a one-dimensional control button, a two-dimensional control button, or a repeat button (Col. 8, Lines 23-45, Col. 7, Lines 14-19, Col. 10, Lines 18-28).

Regarding Claim 21, Dahley et al. teaches a computer program product (Col. 6, Line 62 to Col. 7, Line19) for configuring an operator control panel having a tactile sensor (Col. 6, Line 62 to Col. 7, Line 2, Col. 9, Lines 13-24) said computer program product (Col. 7, lines 2-5) comprising: computer code for defining, an input button (Col. 8, Lines 35-45) and a location of said input button corresponding to a portion of said tactile sensor Col.8, Lines 23-35, Col. 6, Line 62 to Col. 7, Line 2, Col. 9, Lines 13-24); (computer code for defining, a first function of said input button (Col. 8, Lines 35-45, Col. 10, Lines 25-28), said first function associated with an existence of, a first defined level of pressure of, and a location of a touch on said tactile sensor (Col. 8, Lines 23-63); and computer code for defining a second function of said input button, said second function associated with an existence of, a second defined level of pressure of, and said location of a touch on said tactile sensor; and a computer-readable medium for storing said computer codes (Col. 8, Line 35 to Col. 9, Line 9, Col. 10, Lines 25-46, Col. 9, Lines 63-67).

Regarding Claim 23, Dahley et al. teaches computer code for defining said input button provides a user to configure said input button as a toggle button, a pressure-sensitive button, a time-sensitive button, a one-dimensional control button, a two-dimensional control button, or a repeat button (Col. 10, Lines 25-65, Col. 8, Lines 35-45).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahley et al. (6,501,463) in view of Moss (4,818,048).

Regarding Claim 1, Dahley et al. teaches a control panel apparatus (Col. 3, Lines 62-67) having reconfigurable input buttons (Col. 10, Lines 18-46), said apparatus comprising: a tactile sensor (Col. 2, Lines 47-50, Col. 9, Lines 13-24, Col. 1, Lines 13,14), a plurality of input buttons reconfigurable by a user (Col. 8, Lines 61-63, Col. 10, Lines 25-28, Lines 36-41), a representation of said plurality of input buttons placed on said tactile sensor (Col. 10, Lines 17-41); and electronics, coupled to said tactile sensor, for measuring a location of a touch to an input button and an existence of and a level of pressure of said touch (Col. 7, Line 63 to Col. 8, Line 17, Col. 8, Lines 23-35, Lines 55-63) and for storing a plurality of functions, each of said plurality of functions associated with a corresponding one of said plurality of input buttons (Col.

7, Lines 8-19, Col. 8, lines 33-45, Col. 10, Lines 25-42, Col. 9, Lines 63-67); wherein said touch on one of said plurality of input buttons causes said electronics to measure said location and said level of pressure of said touch and said touch causes an occurrence of one of said plurality of functions associated with said location and said level of said pressure of said touch (Col. 7, Line 63 to Col. 8, Line 17, Col. 8, Lines 23-35, Lines 55-63, Col. 7, Lines 8-19, Col. 8, lines 33-45, Col. 10, Lines 25-42, Col. 9, Lines 25-35, Lines 63-67).

However, Dahley et al. fails to teach specifically a control panel apparatus having reconfigurable input buttons, said apparatus comprising: a tactile sensor, a plurality of input buttons reconfigurable by a user.

Moss teaches a control panel apparatus (Col. 1, Lines 28,29) having reconfigurable input buttons (Col. 2, Lines 46-49), said apparatus comprising: a tactile sensor (Col. 2, line 33), a plurality of input buttons reconfigurable by a user (Col. 2, Lines 46-49, Col. 3, Lines 61-65).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of the teaching of Moss in to the Dahley et al. to be able to have a user friendly control panel with tactile sensors to control computer operated display panel.

Regarding Claim 2, Moss teaches the number of said plurality of input buttons can be reconfigured by the user (Col. 2, Lines 46-49).

Dahley et al. teaches the number of said plurality of input buttons can be reconfigured by the user (col. 10, Lines 18-46, Col. 8, lines 61-63).

Regarding Claim 3, Moss teaches the spatial relation between said plurality of input buttons can be reconfigured by the user (Col. 3, Lines 50 to Col. 4, Line 25).

Regarding Claim 4, Dahley et al. teaches the shapes of said plurality of input buttons can be reconfigured by the user (Col. 8, Lines 61 to Col. 9, Line 6).

Regarding Claim 5, Dahley et al. teaches the sizes of said plurality of input buttons can be reconfigured by the user (Col. 8, Lines 61 to Col. 9, Line 6).

Regarding Claim 6, Dahley et al. teaches the locations of said plurality of input buttons can be reconfigured (Col. 8, Lines 61 to Col. 9, Line 6, Col. 10, Lines 25-28).

Regarding Claim 7, Dahley et al. teaches the orientations of said plurality of input buttons can be reconfigured by the user (Col. 10, lines 18-22, Lines 25-28).

Regarding Claim 8, Dahley et al. teaches the functions associated with each of said plurality of input buttons can be reconfigured by the user (Col. 8, line 55 to Col. 9, Line 5, Col. 10, Lines 18-22).

Regarding Claim 9, Dahley et al. teaches a housing for enclosing said electronics and said tactile sensor, said housing including a slot for inserting said representation of said plurality of input buttons onto said tactile sensor (Col. 8, line 55 to Col. 9, Line 5, Col. 10, Lines 18-22).

Regarding Claim 10, Moss teaches a housing for enclosing said electronics and said I tactile sensor, said housing including a top, said top being removable to place said representation of said plurality of input buttons onto said tactile sensor (Col. 2, Lines 46-49, Col. 3, Lines 44-49).

Dahley et al. teaches a housing for enclosing said electronics and said I tactile sensor, said housing including a top, said top being removable to place said representation of said plurality of input buttons onto said tactile sensor (Col. 10, Lines 25-28).

Regarding Claim 11, Dahley et al. teaches the functions associated with each of said plurality of input buttons and with defined levels of pressure can be reconfigured by the user (Col. 8, line 55 to Col. 9, Line 5, Col. 10, Lines 18-22).

Regarding Claim 12, Dahley et al. teaches the functions include providing help, turning on, turning off, increasing, decreasing, and particular actions depending on said defined levels of pressure (Col. 10, lines 25-28).

Moss teaches the functions include providing help, turning on, turning off, increasing, decreasing, and particular actions depending on said defined levels of pressure (Col. 3, Lines 61-65).

Regarding Claim 13, Moss teaches the functions include providing help, turning on, turning off (Col. 3, Lines 61-65, Col. 4, Line 57 to Col. 5, Line 5).

Dahley et al. teaches increasing, decreasing, particular actions depending on said defined levels of pressure, and providing particular actions depending on lengths of time that a defined level of pressure is exerted on said location (Col. 8, line 46 to Col. 9, Line 12).

Regarding Claim 14, Dahley et al. teaches the tactile sensor comprises a conductive foam elastomer (Col. 5, Lines 47, 48).

4. Claims 20, 22, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahley et al. (6,501,463 B1) in view of Brisebois ((6,369,803 B2).

Regarding Claim 20, Dahley et al. teaches operating control device controls an external device coupled to said operating control device (Col. 10, Lines 39-44).

However, Dahley et al. fails to teach operating control device and said external device are in a harsh environment or in an industrial setting.

Brisebois et al. teaches operating control device and said external device are in a harsh environment or in an industrial setting (Col. 1, Lines 47-67).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of the teaching of Brisebois et al. in to the Dahley et al. to be able to have a user friendly control panel with dynamically configurable flexible touch areas to support interactive communication and to control computer operated display panel.

Regarding Claim 22, Dahley et al. teaches operating control device controls an external device coupled to said operating control device (Col. 10, Lines 39-44).

However, Dahley et al. fails to specifically teach computer-readable medium comprises a floppy disk, a magnetic storage disk or tape, a CD-ROM, or a hard drive.

Brisebois et al. teaches teaches computer-readable medium comprises a floppy disk, a magnetic storage disk or tape, a CD-ROM, or a hard drive (Col. 3, lines 30-34, hard drive or CD or floppy are inherent to a desktop computer).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of the teaching of Brisebois et al. in to the Dahley et al. to be able to have a user friendly control panel with dynamically configurable flexible touch areas to support interactive communication and to control computer operated display panel.

Regarding Claim 24, Dahley et al. teaches a system for controlling devices, said system comprising: an operating control panel having a foam tactile sensor (Col. 6, Line 62 to Col. 7, Line 5, Col. 8, Lines 35-45, Col. 10, Lines 25-41, Lines 55-65, Col. 9, Lines 13-24), a representation of input buttons on said foam tactile sensor(Col. 10, Lines 18-41), and electronics, wherein said electronics are capable of measuring a pressure level and a location from a touch on said representation of input buttons on said foam tactile sensor(Col. 10, Lines 25-41, Col. 8, Lines 61-63), processing said pressure level and said location, and outputting a signal that causes a function associated with said pressure level and said location; and an external device coupled

to said operating control panel for receiving said signal and performing said function (Col. 10, lines 25-54, Col. 7, Lines 20-42).

However, Dahley et al. fails to teach specifically operating control device and said external device are in a harsh environment or in an industrial setting.

Brisebois et al. teaches operating control device and said external device are in a harsh environment or in an industrial setting (Col. 1, Lines 47-67).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of the teaching of Brisebois et al. in to the Dahley et al. to be able to have a user friendly control panel with dynamically configurable flexible touch areas to support interactive communication and to control computer operated display panel.

Regarding Claim 25, Dahley et al. teaches software for reconfiguring said input buttons on said representation of said operating control panel (Col. 6, Line 62 to Col. 7, Line 5, Col. 8, Lines 35-45, Col. 10, Lines 25-41, Lines 55-65) and loading said reconfigured input buttons and associated functions to said operating control panel, wherein said electronics are capable storing said reconfigured input buttons (Col. 10, Lines 25-46, Lines 55-65, Col. 9, Lines 63-67, Col. 7, Lines 25-32) and associated functions so as to cause said external device coupled to said operating control panel to perform according to the reconfigured input buttons (Col. 10, Lines 18-54).

Regarding Claim 26, Dahley et al. teaches external device includes a motor controller, a temperature controller, a PLC, a computer, a sensor, a pressurizer, a laser, a furnace, a whirlpool, or a mechanical manipulation device (Col. 10, Lines 36-49).

5. Claims 27-31 rejected under 35 U.S.C. 103(a) as being unpatentable over Dahley et al. (6,501,463 B1) in view of Moss (4,818,048) and Sato (4,955,051).

Regarding Claim 27, Dahley et al. teaches a control panel apparatus having reconfigurable input buttons (Col. 6, Line 62 to Col. 7, Line 5, Col. 8, Lines 35-45, Col. 10, Lines 25-41, Lines 55-65), said apparatus comprising: a tactile sensor (Col. 6, Line 62 to Col. 7, Line 2, Col. 9, Lines 13-24); a plurality of input buttons reconfigurable by a user, a representation of said plurality of input buttons placed on said tactile sensor Col.8, Lines 23-35, Col. 6, Line 62 to Col. 7, Line 2, Col. 9, Lines 13-24); and electronics, coupled to said tactile sensor, for measuring a location of a touch to an input button (Col. 8, Lines 23-35) and for storing a plurality of functions, each of said plurality of functions associated with a corresponding one of said plurality of input buttons (Col.8, Lines 35-45, Lines 61-63, Col. 10, Lines 25-46, Lines 55-65, Col. 9, Lines 63-67); wherein said touch on one of said plurality of input buttons causes said electronics to measure said location of said touch (Col. 8, Lines 23-35, Col. 10, Lines 25-41,) and said touch causes an occurrence of one of said plurality of functions associated with said location of said touch (Col. 10, Lines 25-41, Col. 8, Lines 35-45); and wherein at least one of the number, spatial relation, shapes, sizes, functions, orientations and/or

locations of said plurality of input buttons can be reconfigured by the user (Col. 10, Lines 25-41, Col. 8, Lines 35-45).

However, Dahley et al. fails to teach specifically a control panel apparatus having reconfigurable input buttons, said apparatus comprising: a tactile sensor, a plurality of input buttons reconfigurable by a user.

Moss teaches a control panel apparatus (Col. 1, Lines 28,29) having reconfigurable input buttons (Col. 2, lines 46-49), said apparatus comprising: a tactile sensor (Col. 2, line 33), a plurality of input buttons reconfigurable by a user (Col. 2, Lines 46-49, Col. 3, Lines 61-65).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of the teaching of Moss in to the Dahley et al. to be able to have a user friendly control panel with tactile sensors to control computer operated display panel.

Dahley et al. teaches a control panel apparatus (Col. 3, Lines 62-67) having reconfigurable input buttons (Col. 2, Lines 46-49).

However, Dahley et al. fails to teach specifically spatial relationship between two buttons.

However, Sato teaches spatial relationship between two buttons (Col. 5, Lines 45 to Col. 6, Line 5).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Sato in to the Dahley et al. teaching, to be able to change operational function of a computer operated communication device in response to signals generated by spatially related push-buttons.

Regarding Claim 28, Dahley et al. teaches tactile sensor comprises polyester and conductive layers (Col. 5, Lines 47-50, Lines 65-67, Col. 6, Lines 38-49).

Regarding Claim 29, Dahley et al. teaches a method of configuring an operating control device (Col. 6, Lines 50-61) having a tactile sensor (Col. 9, Lines 13-24, Col. 1, Lines 7-10, Lines 14,15), said method comprising the steps of defining a plurality of input buttons (Col. 8, Lines 61-66, Col. 10, Lines 25-28, Lines 39-41) and a plurality of corresponding locations of said input buttons corresponding to portions of said tactile sensor Col. 10, lines 29-32, Lines 36-41); defining a first set of functions of said plurality of input buttons, said first set of functions triggered by a touch on said tactile sensor at portions corresponding to said plurality of corresponding locations of said input buttons to form a first configuration (Col. 10, Lines 25-41); and generating a first representation of said plurality of input buttons for placement over the tactile sensor within said operating control device (Col. 10, Lines 25-41, Col. 9, Lines 25-57), and loading said first configuration into said operating control device to enable said operating control device to determine an appropriate output dependent on a location of said touch on said first representation on said tactile sensor (Col. 10, Lines 15-28); changing said first configuration to establish a second configuration (Col. 5, Lines 47,48, elastomer materials usually have shape memory and tend to stretch across contours in the contained aggregate thereby masking the desired shape), wherein said second configuration differs from said first configuration by at least one of the number (Col. 10, Lines 25-28), spatial relation, shapes, sizes, functions (Col. 8, lines 61-63), orientations and/or locations of said plurality of input buttons being reconfigured by the user (Col. 10, Lines 18-20); and loading said second configuration into said operating control

device to enable said operating control device to operate according to said second configuration (Col. 10, Lines 25-41).

However, Dahley et al. fails to teach specifically a control panel apparatus having reconfigurable input buttons, said apparatus comprising: a tactile sensor, a plurality of input buttons reconfigurable by a user.

Moss teaches a control panel apparatus (Col. 1, Lines 28,29) having reconfigurable input buttons (Col. 2, lines 46-49), said apparatus comprising: a tactile sensor (Col. 2, line 33), a plurality of input buttons reconfigurable by a user (Col. 2, Lines 46-49, Col. 3, Lines 61-65).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of the teaching of Moss in to the Dahley et al. to be able to have a user friendly control panel with tactile sensors to control computer operated display panel.

Dahley et al. teaches a control panel apparatus (Col. 3, Lines 62-67) having reconfigurable input buttons (Col. 2, Lines 46-49).

However, Dahley et al. fails to teach specifically spatial relationship between two buttons.

However, Sato teaches spatial relationship between two buttons (Col. 5, Lines 45 to Col. 6, Line 5).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Sato in to the Dahley et al. teaching, to be able to change operational function of a computer operated communication device in response to signals generated by spatially related push-buttons.

Regarding Claim 30, Dahley et al. teaches tactile sensor comprises polyester and conductive layers (Col. 5, Lines 47-50, Lines 65-67, Col. 6, Lines 38-49, Non-porous elastomer materials, such as nylon, rubber or latex, can be utilized for core sackmaterials).

Regarding Claim 31, Dahley et al. teaches a computer program product Col. 6, Line 62 to Col. 7, Line 5), for configuring an operator control panel having a tactile sensor Col. 6, Line 62 to Col. 7, Line 5, Col. 9, Lines 13-24), said computer program product (Col. 6, Line 62 to Col. 7, Line 5), comprising: computer code for defining an input button (Col. 10, Lines 25-54) and a location of said input button corresponding to a portion of said tactile sensor (Col. 10, Lines 29-41); computer code for defining at least one of a function (Col. 8, Lines 35-45), size, orientation, location, spatial relation, and/or shape of said input button to form a first configuration (Col. 8, Lines 23-45, Col. 7, Lines 14-19, Col. 10, Lines 18-28).; and computer code for altering at least one of said function, size, orientation, location, spatial relation, and/or shape Of Said input button from said first configuration to form a second configuration; and a computer-readable medium for storing said computer codes (Col. 8, Lines 23-45, Col. 7, Lines 14-19, Col. 10, Lines 18-28).

However, Dahley et al. fails to teach specifically a control panel apparatus having reconfigurable input buttons, said apparatus comprising: a tactile sensor, a plurality of input buttons reconfigurable by a user.

Moss teaches a control panel apparatus (Col. 1, Lines 28,29) having reconfigurable input buttons (Col. 2, lines 46-49), said apparatus comprising: a tactile sensor (Col. 2, line 33), a plurality of input buttons reconfigurable by a user (Col. 2, Lines 46-49, Col. 3, Lines 61-65).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of the teaching of Moss in to the Dahley et al. to be able to have a user friendly control panel with tactile sensors to control computer operated display panel.

Dahley et al. teaches a control panel apparatus (Col. 3, Lines 62-67) having reconfigurable input buttons (Col. 2, Lines 46-49).

However, Dahley et al. fails to teach specifically spatial relationship between two buttons.

However, Sato teaches spatial relationship between two buttons (Col. 5, Lines 45 to Col. 6, Line 5).

Thus it would have been obvious to one in the ordinary skill in the art at the time of invention was made to incorporate the teaching of Sato in to the Dahley et al. teaching, to be able to change operational function of a computer operated communication device in response to signals generated by spatially related push-buttons.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is informed that all of the other additional cited references either anticipate or render the claims obvious. In order to not to be repetitive and exhaustive, the examiner did draft additional rejection based on those references.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogata (6,394,906 B1) Actuating device for game machine.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M Dharia whose telephone number is 703-605-1231. The examiner can normally be reached on M-F 8AM to 5PM.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-3054938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

PD

AU2673

March 3, 2004

VIJAY SHANKAR
PRIMARY EXAMINER